

WHAT IS CLAIMED IS

1. In phase quadrature signal generator including a phase shifter receiving at an input terminal an input signal supplied to phase shifting means formed of passive elements, arranged for delivering at first and second output terminals, first and second in phase quadrature signals, wherein it further includes, between the
5 phase shifting means and the output terminals, transconductor means having a transconductance proportional to the passive elements, arranged so as to obtain a transfer function between said first and second in phase quadrature signals independent of said passive elements.

2. In phase quadrature signal generator according to claim 1, wherein said
10 phase shifting means include:

- a first phase shifter circuit including a first resistor connected between the input terminal and a first output of the phase shifting means and a first capacitor connected between the first output of the phase shifting means and a reference potential,
- 15 - a second phase shifter circuit including a second capacitor, matched to said first capacitor, connected between the input terminal and a second output of the phase shifting means and a second resistor, matched to said first resistor, connected between the second output of the phase shifting means and said reference potential

20 and wherein said transconductor means include

- a first transconductor circuit having a first determined transconductance proportional to a capacitance matched to the capacitance of said first and second capacitors, and
- a second transconductor circuit having a second determined transconductance
25 proportional to a conductance matched with said first and second resistors.

3. In phase quadrature signal generator according to claim 2, wherein said first and second transconductance are temperature independent so as to obtain a temperature independent transfer function between said first and second in phase quadrature signals.

30 4. In phase quadrature signal generator according to claim 3, wherein said first and second transconductances are determined respectively by means of a first current source proportional to absolute temperature and to the capacitance value and a second current source proportional to absolute temperature and to the conductance value.

5. In phase quadrature signal generator according to claim 1, wherein said in phase quadrature signals have the same amplitude at a given frequency, and wherein said frequency is dependent upon a dynamically modifiable parameter.

6. In phase quadrature signal generator according to claim 5, wherein said
5 modifiable parameter corresponds to the frequency of a clocked signal.

7. Image frequency rejection receiver including

- means for receiving external signals at a given frequency,
- filtering means formed of passive elements, and
- conversion means including at least two mixers for delivering frequency shifted in
10 phase quadrature signals at a frequency, wherein it includes
- transconductor means having a transconductance proportional to the passive elements, arranged so as to obtain a transfer function between the frequency shifted signals independent of said passive elements.

8. Receiver according to claim 7, wherein the filtering means include a
15 passive phase shifter I-Q placed between the reception means and the conversion means and wherein the transconductor means include a first transistor of the first mixer and a second transistor of the second mixer.

9. Receiver according to claim 8, wherein the filtering means include a
passive polyphase filter with at least one stage, and wherein the transconductor
20 means include two transistors in amplifier mode.